

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H03L7/093 H03H7/01

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H03L H03H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 774 023 A (IRWIN JAMES STUART) 30 June 1998 (1998-06-30) cited in the application column 3, line 48 - column 4, line 26; figure 4	1-6
X A	US 5 424 689 A (GILLIG STEVEN F ET AL) 13 June 1995 (1995-06-13) column 3, line 31 - column 4, line 28 column 5, lines 5-67; claim 9; figures 4,8 ----- -/--	1,2,4-6 3

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
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- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- * & * document member of the same patent family

Date of the actual completion of the international search

11 October 2004

Date of mailing of the international search report

20/10/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Waters, D

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	CRANINCKX J ET AL: "FULLY INTEGRATED CMOS DCS-1800 FREQUENCY SYNTHESIZER" IEEE JOURNAL OF SOLID-STATE CIRCUITS, IEEE INC. NEW YORK, US, vol. 33, no. 12, December 1998 (1998-12), pages 2054-2065, XP000880509 ISSN: 0018-9200 cited in the application page 2057, right-hand column, line 3 - page 2059, left-hand column, line 6; figures 9,10	1-6
X,P	US 2004/101081 A1 (HSU TSE-HSIANG) 27 May 2004 (2004-05-27)	1,2,4-6
A,P	abstract; figure 5	3

Information on patent family members

International Application No

PCT/EP2004/006481

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5774023	A	30-06-1998	NONE	
US 5424689	A	13-06-1995	FR 2714242 A1 GB 2285189 A , B IT RM940818 A1	23-06-1995 28-06-1995 22-06-1995
US 2004101081	A1	27-05-2004	TW 576023 B	11-02-2004